



Universiteit Antwerpen
| Faculteit Sociale Wetenschappen

The learning process of student teachers with Lesson Study

preconditions, influencing factors and challenges

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Lesson Study @ASoE of the UA

- **Antwerp School of Education (ASoE)**

- One year
- Master of Teaching training
- Interns & teachers-in-training

- LS as master thesis project
- Voluntary participation



Research project

2021-2022 => STUDY 1

Introduction of LS as part of student teachers' thesis

LS participants

- Randomly assigned in duos/trios
- without taking into account their background or subject didactics

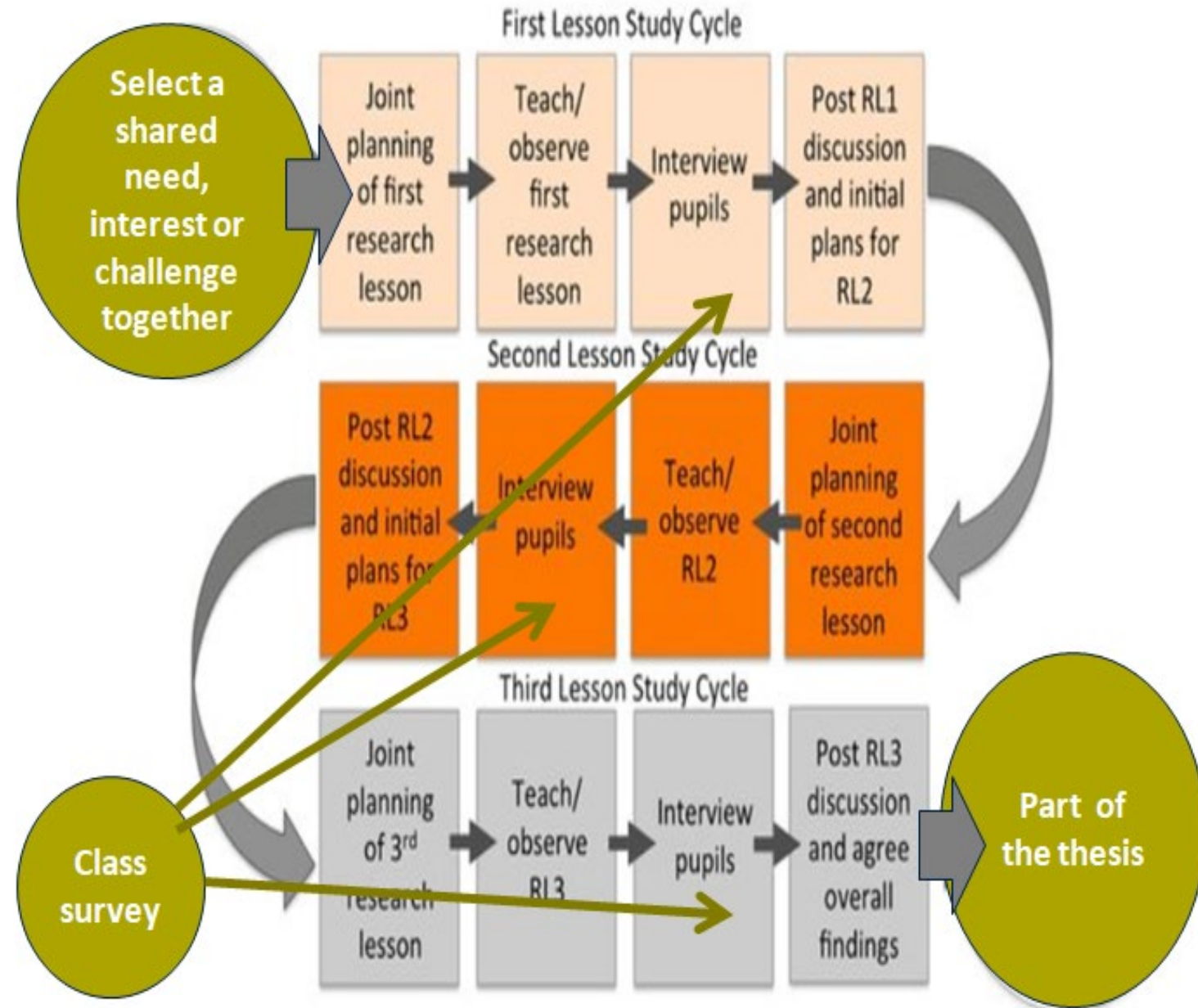


Figure 1. Dudley's Lesson Study Process
(Source: Dudley, 2014)

Research questions – study 1 – 2021-2022

Focus 1 on evaluation of LS as a master thesis format

Focus 2 on (pre)conditions and influencing factors (challenges)

RQ1 What conditional factors, preconditions and challenges do student teachers perceive as hindering or supporting?

RQ2 What design adjustments are possibly required for implementation?

RQ3 To what extent is 'Lesson Study' suitable as a graduation research project within the academic one year teaching program?



study 2 – 2022-2023

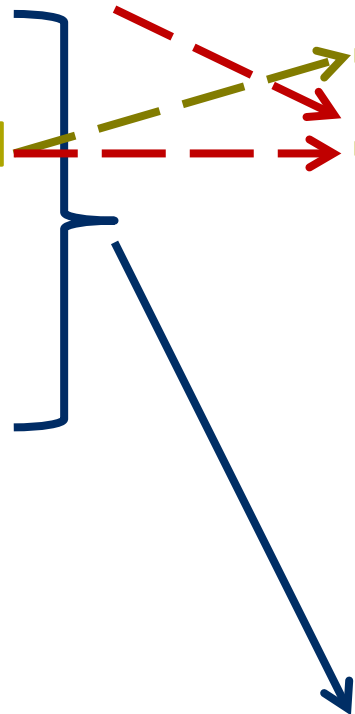
Participants, measurement instruments & data collection

Evaluation research conducted by 2 students

- 10 respondents: **survey**
- 8 respondents: **semi-structured in-depth interviews**
- 2 respondents stopped

Broad & depth analysis research

- 7 respondents (LS cycle): **survey** (87.5%)
- 9 respondents: **semi-structured, broad & in depth...**
 - **Focus group discussions:**
 - 1 duo (students of evaluation research)
 - 2 trios (LS)
 - Interview = 1 (LS)
- Written source = **evaluation research**



RQ1

What conditional factors, preconditions and challenges do student-teachers perceive as supporting or hindering?

Supporting factors - findings

LS team members

- Ultimately, collaboration is recognized as useful and successful
- The LS experience met or exceeded overall personal expectations (7/10)
- **Knowing each other in advance is not necessary for good cooperation**
- **Teaching the same subject is indicated as important and as advantage**

LS process

- **A well-defined research question** provides guidance, direction and focus
- **A well-prepared RL 1 saves time**
- Observing pupils (as intern) before the LS to get a good idea of the class was positively experienced
- Competencies developed through LS and collaboration **meet student teachers' expectations**
- **The available materials are very useful en supportive**

Master thesis

- **The thesis makes a link with teaching practice via LS**
- Collaboration in duos or trios produces learning gains
- Competencies developed through LS and collaboration **meet curriculum expectations**

Hindering factors - findings

LS team members

- They experience high time and work pressure
- Interns experience a lack of teaching practice and didactics
- The combination of teachers-in-training and interns creates a practical puzzle
- **Teaching another subject hinders the teacher's ability to talk**
- Physical meetings prove difficult due to the distance, class schedules and student profile
- Interns learn more from their partner “teacher-in-training”
- **They do not feel prepared enough after the kick-off**

LS process

- Lesson plan preparation times vary greatly (2 hours to 30 hours)
- The freedom given by the promoters increased the feeling of stress or uncertainty
- **There was a need for more time**
- In combination with internship caused a large workload
- Guidance proved to be insufficient
- The available materials are not delivered digitally and are therefore not adaptable
- An enormous amount of time was lost searching for and designing suitable material (e.g. observation form),
- The time investment of the LS implementation (three research lessons) is too much for this short internship (two weeks)

Master thesis

- **There was a need for**
 - ✓ clear planning and structure,
 - ✓ clear agreements and deadlines,
 - ✓ as well as timely feedback.
- **The time investment for the thesis (literature study included also LS) was too large in relation to the time investment of the LS implementation**
- Organizing and finishing the thesis was experienced as difficult and stressful

RQ2

What design adjustments are possibly required for implementation?

Adjustments in support

Study 1 (2021-2022)

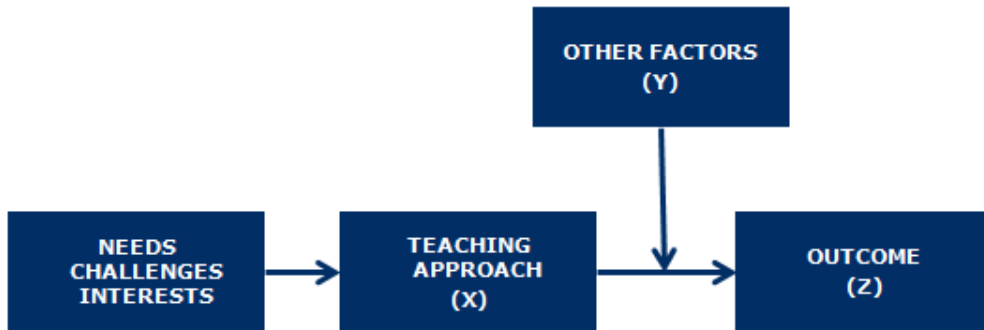
- Roadbook with time table (nov-may)
- Kick-off
- Handbook = recommended reference work and templates with per LS phase:
 - ✓ examples,
 - ✓ testimonials,
 - ✓ theoretical background,
 - ✓ assignments,
 - ✓ tips and quotes from teachers
- Digital tools = email, learning platform
- Remote coaching = online kick-off, online supportive feedback via email



Study 2 (2022-2023)

- Roadbook with time table (nov-may) and **time commitment (max. 60 hrs)**
- Kick-off = **video recorded and available**
- Handbook = **mandatory use of** reference work and templates with per LS phase: examples, testimonials, theoretical background, assignments, tips and quotes from teachers
- Digital tools = email, Teams, learning platform **with available materials (topic list with references in literature, templates, implementation models, webinar of kick-off)**
- Remote coaching = online kick-off **recording available, online support calls, reminder emails announcing deadlines, online feedback on request, one Teams meeting required in late December, other Teams meeting on request**

Examples of templates



OBSERVATION FORM

XYZ research question

Research lesson 1 - 2

Teacher:

Observer:

Case pupils:

Les phase	
CLASS 1	
Expected reactions case pupil A	
Observed reactions case pupil A	
Expected reactions case pupil B	
Observed reactions case pupil B	

Adjustments in LS format

Study 1

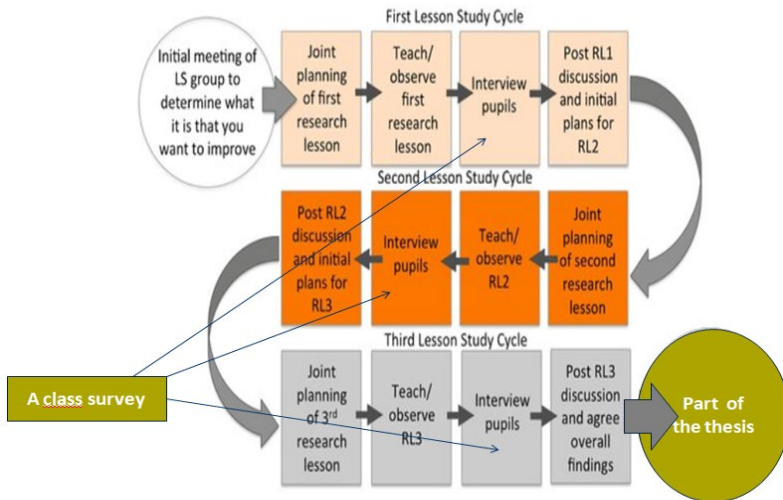
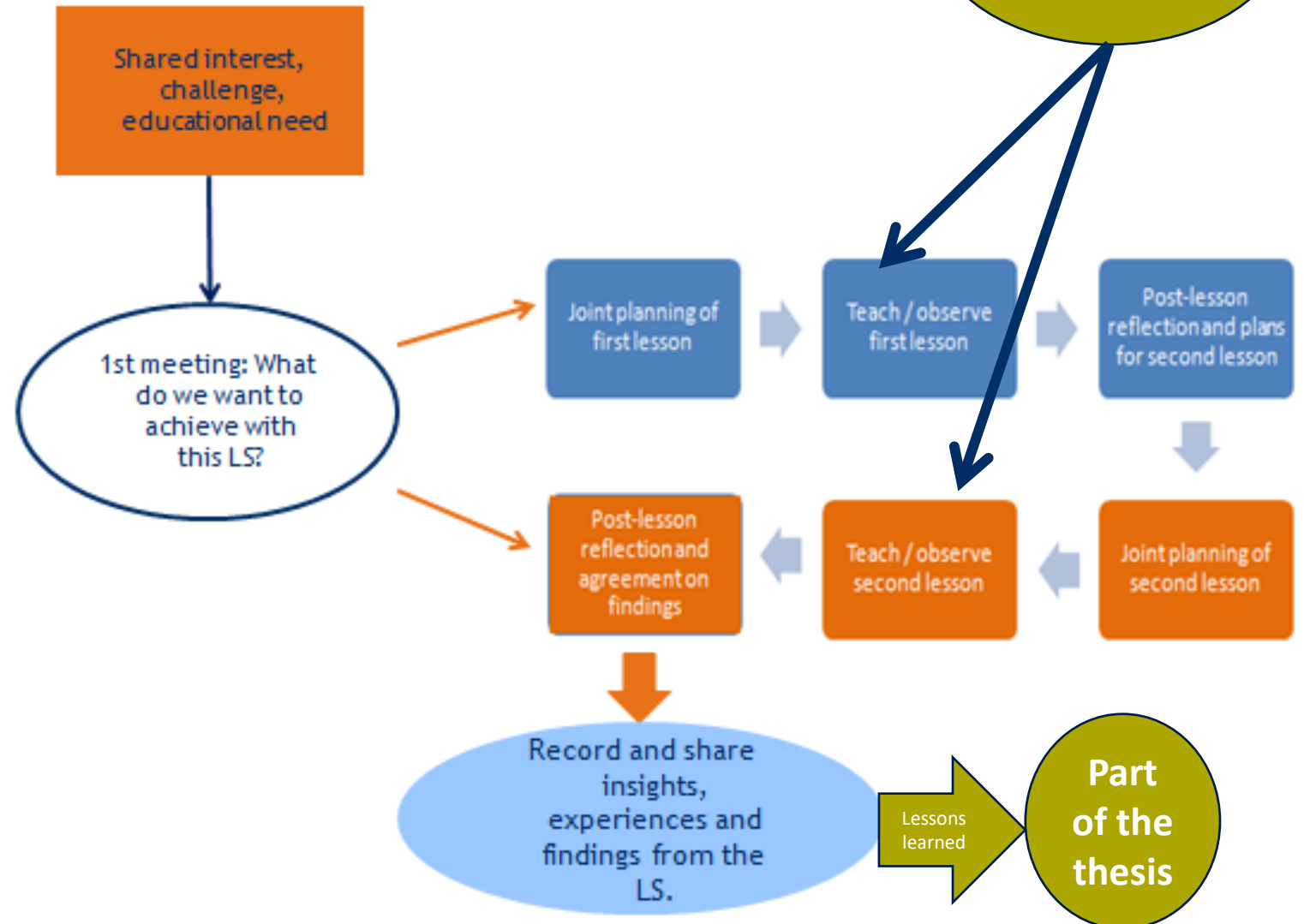


Figure 1. Dudley's Lesson Study Process (Source: Dudley, 2014)

Study 2

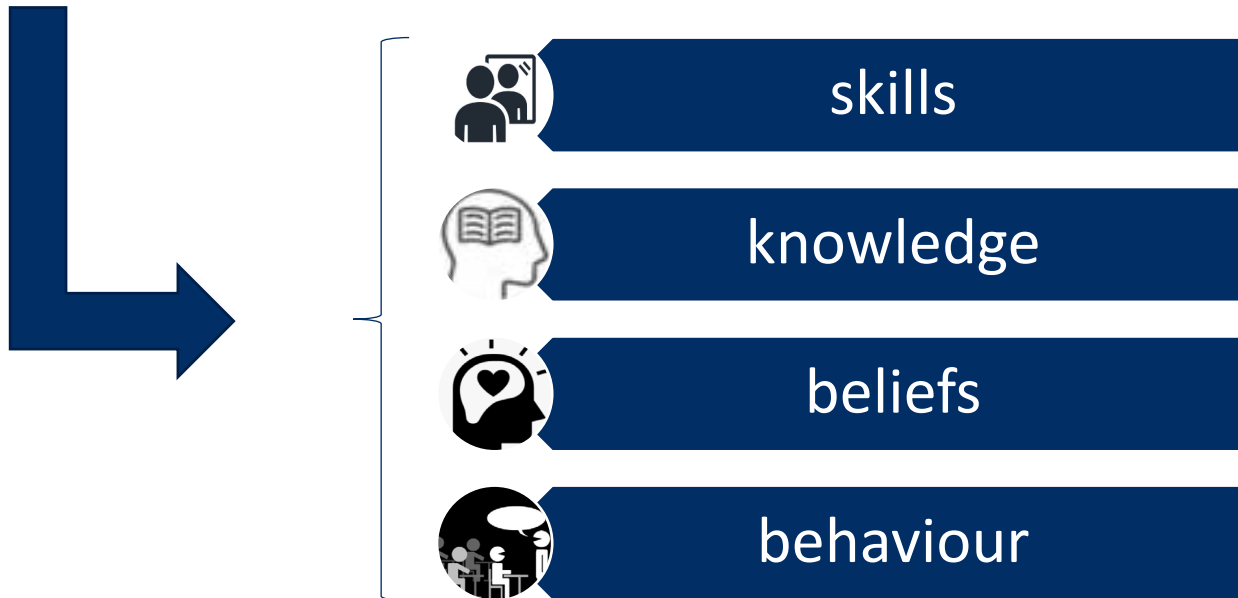


RQ3

To what extent is 'Lesson Study' suitable as a graduation research project within the academic one year teaching program?

Outcomes

- Most students experienced the process as **successful** and **would recommend** Lesson Study as a topic for the master's thesis.
- Reasons :
 - Mainly the practice-oriented approach,
 - They **LEARNED** from their fellow students through close collaboration, input & feedback



Outcomes

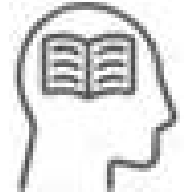
Skills



“I have learned to pay attention to differences but also similarities between students by dividing them into groups (based on instructional requirements).”

- Critical self-reflection, problem-solving thinking, collaboration,...
- Developing a reflection method
- Learning from practice.
- Analyzing texts and methods
- Better guide students to work independently and study more effectively.
- Noticing learning behavior in students.

Knowledge



- Knowledge about differentiating working methods and their advantages and disadvantages.
- Knowledge about new working methods, methods for differentiation, etc.
- Learning to differentiate in a goal-oriented and effective way.
- Developing learning paths for pupils

“The knowledge about how to approach lessons differently, for example differentiation and motivation...”

Outcomes

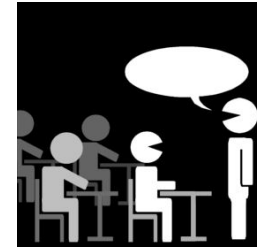


Beliefs

- Gain more insight into how students experience my lessons.
- Gain more insight into certain obstacles from classroom practice.

"The more variety, the more students you reach, so more differentiation does affect my students. What an eye-opener."

"If something is not right, they don't participate, what an insight I got there!"

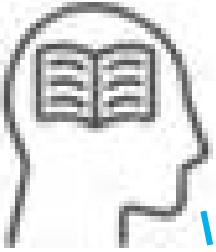


Behaviour

- Developing working methods and adapting them to the level of the students.
- **Become better at teaching by understanding how pupils learn**

"You just try something and you don't know the effect. LS changes your attitude in that area..."

Thanks to LS, I have more **KNOWLEDGE** about self-directed learning among students...



I have become better organizationally, I can now differentiate better...



I **DEVELOPED** a better relationship with the students through the LS cycle...

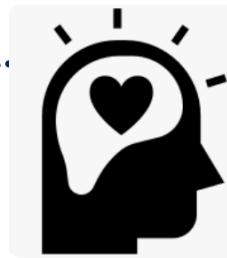
I gained a different **ATTITUDE** to learning by researching together and sharing knowledge or experience...

Thank you for listening
iris.willems@uantwerpen.be

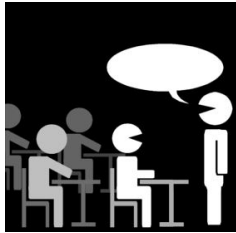
I now **THINK MORE** about certain choices and have become more aware of the influence this has on the students...

I have **LEARNED** to vary more in working methods, & in looking for a suitable working method...

You just try something and you don't know the effect. LS changes your **ATTITUDE** in that area...



This MP was very educational: based on the pupils feedback that I obtained through an interview, I adjusted my 2nd lesson, the associated work bundles, the working methods used, and instructions. What a **WONDERFUL EXPERIENCE...**



Questions ...?

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